

ABSTRACT

**Profile of Antihypertensive Agents
in Pediatric Patients with Lupus Nephritis
(Study at Inpatient Care Unit of Pediatric Department
Dr. Soetomo Teaching Hospital Surabaya)**

Fitria Rachmayanti

Lupus nephritis (LN) is an autoimmune disease often occurred in recent years. One of the major causes of mortality and morbidity in patients with LN is cardiovascular disease, primarily hypertension. The purpose of hypertension treatment in children with LN is to reduce the short-term and long-term risks of cardiovascular disease and organ damage. The recommended antihypertensive agent is RAAS inhibiting therapy, because it can lower the blood pressure and also has renoprotective and antiproteinuria effects. In addition, other antihypertensive agents suggested are diuretics and CCB due to its role in controlling hypertension in pediatric patients with lupus nephritis.

The purpose of this study was to analyze the profile of antihypertensive agent based on type, dose, route of administration, frequency of drug use and to identify side effects associated with the antihypertensive agent. This study was conducted retrospectively by descriptive analysis from January to December 2017 with 35 patients fulfilled the inclusion criteria. The study had been ethically approved by The Ethical Committee of Dr. Soetomo Teaching Hospital Surabaya.

The results showed that the distribution and dosage of antihypertensive agent used in pediatric patients were ACEIs (captopril 0,1-2 mg/kg/day and lisinopril 0,1-1 mg/kg/day); CCBs (amlodipine 0,05-0,2 mg/kg/day and nifedipine 0,25-1 mg/kg/dose); ARB (losartan 0,5-1,4 mg/kg/day), and diuretics (furosemide 0,5-1 mg/kg/times). The selection of antihypertensive agents were based on patient's condition related to clinical and laboratory data assessment. The drug utilization of antihypertensive agents including type, dose, route of administration, and frequency of drug use were in accordance with the guidelines of Dr. Soetomo Teaching Hospital clinical practice.

Keywords: ACEI, antihypertensive agent, antiproteinuria, ARB, diuretics, CCB, lupus nephritis, pediatrics, renoprotective agent